

We claim:

1. An oral composition for use in treating benign prostatic hyperplasia, comprising:
  - a saw palmetto extract; and
  - a controlled release system, said system comprising:
    - a coating formed from a material impervious to acidic conditions in the stomach that is soluble in the duodenum and small intestine.
2. The composition of claim 1, wherein the controlled release system prevents the saw palmetto extract from being degraded in the stomach.
3. The composition of claim 1, wherein the controlled release system comprises a system selected from the group consisting of microencapsulation in coatings of variable thickness, each with a different dissolution pattern; and capsulation in a material matrix that dissolves slowly in the neutral environment of the duodenum and small intestine; and binding with bioadhesives that adhere to the wall of the small intestine.
4. The composition of claim 1, wherein the composition further comprises a compound that minimizes smooth muscle contractions.
5. The composition of claim 4, wherein the compound that minimizes smooth muscle contractions is an antispasmodic compound selected from the group consisting of Belladonna Alkaloid, Choleus Forskholi, European Goldenrod, Peppermint, and Passion Fruit seed.
6. An oral composition for improving the effectiveness of saw palmetto extract therapy, comprising:
  - a saw palmetto extract; and
  - a controlled release system, said system comprising:
    - a coating formed from a material impervious to acidic conditions in the stomach that is soluble in the duodenum and small intestine.

7. The composition of claim 6, wherein the controlled release system prevents the saw palmetto extract from being degraded in the stomach.
8. The composition of claim 6, wherein the controlled release system comprises a system selected from the group consisting of microencapsulation in coatings of variable thickness, each with a different dissolution pattern; and capsulation in a material matrix that dissolves slowly in the neutral environment of the duodenum and small intestine; and binding with bioadhesives that adhere to the wall of the small intestine.
9. The composition of claim 6, wherein the composition further comprises a compound that minimizes smooth muscle contractions.
10. The composition of claim 9, wherein the compound that minimizes smooth muscle contractions is an antispasmodic compound selected from the group consisting of Belladonna Alkaloid, Choleus Forskholi, European Goldenrod, Peppermint, and Passion Fruit seed.
11. An oral saw palmetto extract composition, the improvement comprising:  
a compound that reduces smooth muscle contractions; and  
a controlled release system, said system comprising:  
a system selected from the group consisting of microencapsulation in coatings of variable thickness, each with a different dissolution pattern; encapsulation in a material matrix that dissolves slowly in the neutral environment of the duodenum and small intestine; and binding with bioadhesives that adhere to the wall of the small intestine.
12. A method of treating benign prostatic hyperplasia, comprising the step of:  
administering a therapeutically effective amount of a saw palmetto extract which comprises an oral delivery vehicle comprising a coating formed from a material impervious to acidic conditions in the stomach that is soluble in the duodenum and small

intestine.

13. The method of claim 12, wherein the saw palmetto extract is released into the bloodstream over an extended period.

14. The method of claim 12, wherein the coating provides controlled release of the saw palmetto extract by a method selected from the group consisting of microencapsulation in coatings of variable thickness, each with a different dissolution pattern; and capsulation in a material matrix that dissolves slowly in the neutral environment of the duodenum and small intestine; and binding with bioadhesives that adhere to the wall of the small intestine.

15. The method of claim 12, wherein the coating passes through the stomach intact.

16. The method of claim 12, wherein the saw palmetto extract is initially released in the duodenum.

17. The method of claim 12, wherein the saw palmetto extract is released before it enters the colon.

18. A method of improving the efficacy of saw palmetto extract treatment, comprising the steps of:

providing a therapeutically effective amount of a saw palmetto extract in an oral formulation; and

encapsulating the saw palmetto extract in a coating formed from a material impervious to acidic conditions in the stomach that is soluble in the duodenum and small intestine.

19. The method of claim 18, wherein the saw palmetto extract is released into the bloodstream over an extended period.

20. The method of claim 18, wherein the coating provides controlled release of the saw palmetto extract by a method selected from the group consisting of microencapsulation in coatings of variable thickness, each with a different dissolution pattern; and capsulation in a material matrix that dissolves slowly in the neutral environment of the duodenum and small intestine; and binding with bioadhesives that adhere to the wall of the small intestine.

21. The method of claim 18, wherein the coating passes through the stomach intact.

22. The method of claim 18, wherein the saw palmetto extract is initially released in the duodenum.

23. The method of claim 18, wherein the saw palmetto extract is released before it enters the colon.

24. A composition for use in treating benign prostatic hyperplasia comprising:  
a saw palmetto extract provided in an oral formulation; and  
one or more antispasmodic compounds selected from the group consisting of Belladonna Alkaloid, Choleus Forskholi, European Goldenrod, Peppermint, and Passion Fruit seed.

25. The composition of claim 24, further comprising a controlled release system, comprising:  
a coating formed from a material impervious to acidic conditions in the stomach that is soluble in the duodenum and small intestine.

26. A method for improving the efficacy of saw palmetto extract treatment, comprising the steps of:  
providing a therapeutically effective amount of a saw palmetto extract; and  
further providing one or more antispasmodic compounds.

27. The method of claim 26 wherein the antispasmodic compound is selected from the group consisting of Belladonna Alkaloid, Choleus Forskholi, European Goldenrod, Peppermint, and Passion Fruit seed.

11/11/2019 11:11:11 AM